

**ABSTRACT**

After via etch, a low-k dielectric layer (104) is treated with an in-situ O<sub>2</sub> plasma. Resist poisoning is caused by a N source that causes an interaction between low-k films (104), such as OSG, and DUV resist (130,132). The in-situ plasma treatment immediately removes the source of poisoning to reduce or eliminate poisoning at trench patterning.